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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,393	04/13/2006	Takayuki Watanabe	205700204294-US0	8589
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DARBY & DARBY P.C. P.O. BOX 770 Church Street Station New York, NY 10008-0770			EXAMINER CHEVALIER, ALICIA ANN	
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			1794	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/595,393

## Applicant(s)

WATANABE, TAKAYUKI

## Examiner

ALICIA CHEVALIER

## Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 6/16/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**RESPONSE TO AMENDMENT**

1. Claims 1-4 are pending in the application.
2. Amendments to the claims, filed on June 22, 2009, have been entered in the above-identified application.

***WITHDRAWN REJECTIONS***

3. The 35 U.S.C. §112 rejections of claims 1-4 regarding the phrase "each of the layers A and B has voids formed by drawing and is independently formed from a resin composition containing a thermoplastic resin" only, made of record in office action mailed March 20, 2009, page 2, paragraph #4 have been withdrawn due to Applicant's amendment in the response filed June 22, 2009.
4. The 35 U.S.C. §102(e) rejection of claims 1-4 over Laney et al. (US Patent No. 6,846,606), made of record in the office action mailed March 20, 2009, pages 3-4, paragraph #6 has been withdrawn due to Applicant's perfection of their priority date by submission of the English translation of JP2003-357480 filed June 22, 2009.
5. The 35 U.S.C. §102(b) rejection of claims 1-4 over Schiffer et al. et al. (US Patent Application Publication No. 2002/0098341), made of record in the office action mailed March 20, 2009, pages 4-5, paragraph #7 has been withdrawn due to Applicant's amendment in the response filed June 22, 2009.

**REJECTIONS**

6. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

***Claim Rejections - 35 USC § 112***

7. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "rutile type titanium oxide" in claim 1 is unclear and renders the claims vague and indefinite. The addition of the word "type" to an otherwise definite expression extends the scope of the expression so as to render it indefinite.

The phrase "wherein the thermoplastic resin is an aliphatic polyester" in claim 1 is unclear and renders the claims vague and indefinite. It is unclear if Applicant is claiming

***Claim Rejections - 35 USC § 102***

8. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Koyama et al. (WO 00/24579), see English language equivalent U.S. Patent No. 6,627,298.

Koyama discloses a reflecting film comprising a layer B that contains rutile type titanium oxide and a thermoplastic resin (*surface layer (A), col. 3, lines 9-19*), and a layer A that contains fine powder filler other than rutile type titanium oxide and a thermoplastic resin (*base layer (B), col. 3, lines 19-25*). The rutile type titanium oxide has a vanadium content of 5 ppm or less, since the reference only discloses rutile titanium oxide (*col. 3, lines 16-17*). The layer A is

positioned outermost on the side of a surface used for reflection (*figure 2*). Layer A has voids formed by drawing (*col. 5, lines 2-11*). The thermoplastic resin is an aliphatic polyester, which is a polylactic acid based resin (*col. 3, line 66*). The reflecting film has a two-layer construction including the layer A and the layer B (*col. 2, lines 30-40*).

Koyama does not explicitly disclose that layer B contains voids. However, Koyama discloses that desirable voids are formed by stretching a resin composition containing an inorganic fine powder and a thermoplastic resin (*col. 5, lines 9-11*). Therefore, since both layers A and B contain the same thermoplastic resin, e.g. aliphatic polyester (*col. 3, line 66*), inorganic fine powders, e.g. layer B rutile titanium oxide fine powder (*col. 3, lines 16-17*) and layer A calcium carbonate fine powder (*col. 3, line 24*), and are both biaxially stretched films (*col. 3, lines 10-11 and 20*), it would be inherent that both layers have voids.

The preambles “reflecting film” and “reflecting plate for a liquid crystal display device” are deemed to be statements with regard to the intended use and are not further limiting in so far as the structure of the product is concerned. In article claims, a claimed intended use must result in a *structural difference* between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. MPEP § 2111.02. Furthermore, Koyama discloses that the thermal transfer image-recording material has a very high gloss (*col. 2, lines 20-23 and col. 4, lines 52-53*). Thus Koyama’s material is capable of reflecting light.

### ***Claim Rejections - 35 USC § 103***

9. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyama et al. (WO 00/24579), see English language equivalent U.S. Patent No. 6,627,298.

Koyama discloses a reflecting film comprising a layer B that contains rutile type titanium oxide and a thermoplastic resin (*surface layer (A)*, *col. 3, lines 9-19*), and a layer A that contains fine powder filler other than rutile type titanium oxide and a thermoplastic resin (*base layer (B)*, *col. 3, lines 19-25*). The rutile type titanium oxide has a vanadium content of 5 ppm or less, since the reference only discloses rutile titanium oxide (*col. 3, lines 16-17*). The layer A is positioned outermost on the side of a surface used for reflection (*figure 2*). Layer A has voids formed by drawing (*col. 5, lines 2-11*). The thermoplastic resin is an aliphatic polyester, which is a polylactic acid based resin (*col. 3, line 66*). The reflecting film has a two-layer construction including the layer A and the layer B (*col. 2, lines 30-40*).

Koyama does not explicitly disclose that layer B contains voids. However, Koyama discloses that forming voids improve a cushion effect of the support, to thereby improve contact property of the thermal transfer image-recording material with a thermal head and produce an image with higher density (*col. 5, lines 3-8*). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to also include voids in layer B in order to contact property of the thermal transfer image-recording material with a thermal head and produce an image with higher density.

The preambles “reflecting film” and “reflecting plate for a liquid crystal display device” are deemed to be statements with regard to the intended use and are not further limiting in so far as the structure of the product is concerned. In article claims, a claimed intended use must result in a *structural difference* between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. MPEP § 2111.02. Furthermore, Koyama

discloses that the thermal transfer image-recording material has a very high gloss (*col. 2, lines 20-23 and col. 4, lines 52-53*). Thus Koyama's material is capable of reflecting light.

### ***ANSWERS TO APPLICANT'S ARGUMENTS***

10. Applicant's arguments in the response filed June 22, 2009 regarding the 35 USC 102 rejections previously of record have been considered but are moot since the rejections have been withdrawn.

11. Applicant's arguments in the response filed June 22, 2009 regarding the 35 USC 112-2<sup>nd</sup> paragraph rejection of the "rutile type titanium oxide" of record have been carefully considered but are deemed unpersuasive.

Applicant argues that one of ordinary skill in the art would certainly understand exactly that "rutile type" titanium oxide refers to titanium oxide occurring as rutile.

The examiner disagrees that one of ordinary skill in the art would know that rutile "type" titanium oxide refers to. It is clear what is meant by rutile titanium oxide. However, the addition of the word "type" to an otherwise definite expression extends the scope of the expression so as to render it indefinite. Therefore, it is unclear what is included by the word type to the expression rutile titanium oxide.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alicia Chevalier/

Primary Examiner, Art Unit 1794

10/15/2009